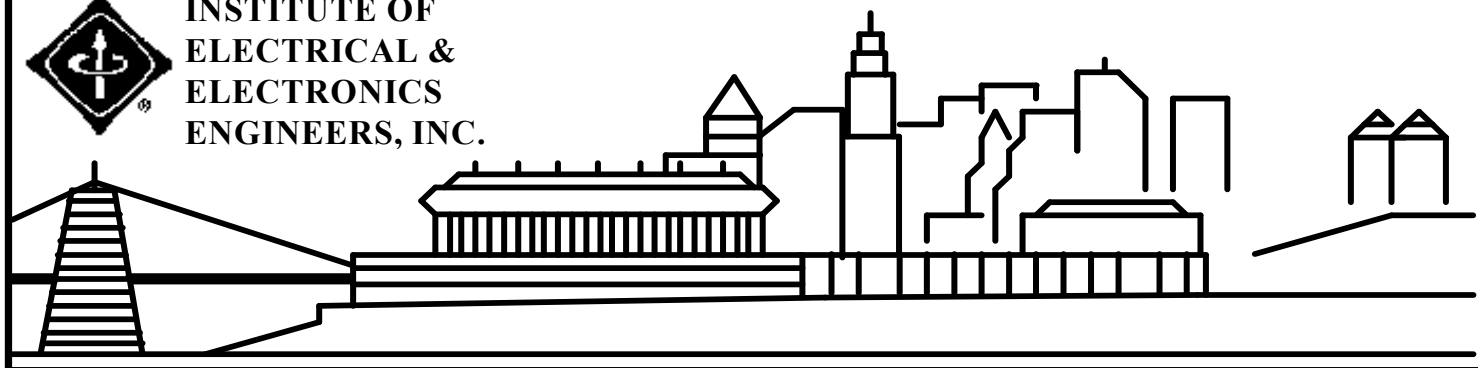




**INSTITUTE OF
ELECTRICAL &
ELECTRONICS
ENGINEERS, INC.**



APRIL 1993

IEEE CINCINNATI SECTION NEWSLETTER

APRIL MEETING: Tesla: Man Out Of Time

DATE: Thursday, April 22, 1993

PLACE: Institute of Advanced Manufacturing Sciences (IAMS)

TIME: 5:30 Social Time
6:00 Dinner (Spaghetti)
7:00 Program
8:00 Adjourn

COST: \$7.00 Members
\$3.00 Students
\$9.00 Non-Members

Reservations are required for dinner only!

CALL DEE SCOTT AT 385-9446 BY NOON, WEDNESDAY, APRIL 21st

Please provide NAME, MEMBER # and COMPANY NAME when making reservations

ABOUT THE MEETING....

This program, by Messrs. Richard H. Engelmann and Richard J. Reiman will present an overview of Nicola Tesla and his inventions and innovations which included the polyphase induction motor and the 60 Hz polyphase transmission and distribution systems necessary for the motor's utilization, wireless telegraph (the basis for radio), remote wireless control, the use of the Earth as a current (later used in Loran), ionizing of gases in an evacuated glass tube (the basis for fluorescent lighting), diathermy and therapeutic medical treatments, and ball lightning with application to controlled nuclear fission.

Background of the Speakers

Professor Richard H. Engelmann is Associate Dean Emeritus and Professor Emeritus of Electrical Engineering at U.C. He was first appointed to the faculty in 1948 as an instructor in EE and rose to professor in 1961. He graduated from Mt. Healthy HS in 1940 and the U.S. Naval Academy in 1944. He entered U.C. in 1947 after service at sea in the Navy and earned his Master's Degree in 1949.

During 1963-64, he and his family were at Bengal Engineering College in India where he served as Guest Professor. Prof. Engelmann returned to India for the summer of 1965 to lead a group of American consultants which conducted summer institutes at several Indian engineering schools.

Prof. Engelmann was head of the Department of Electrical and Computer Engineering from 1967-79. In 1981, he was appointed Associate Dean for Graduate Studies and Research in the College of Engineering, a post he held until the end of 1986. In that position, he led the development of a joint master's program with General Electric, Evendale, the Advanced Course in Manufacturing.

He is a Life Member of the U.S. Naval Institute, the IEEE and of the American Society for Engineering Education. He is an Honorary Member Ad Vitam of the Tesla Memorial Society. and is also a member of numerous honorary societies including Tau Beta Pi (for which he was Faculty Advisor for 12 years), Eta Kappa Nu, and Texnikoi. He has served as a consultant for several organizations including General Electric, Avco Electronics and the National Institute of Health. He retired in 1988.

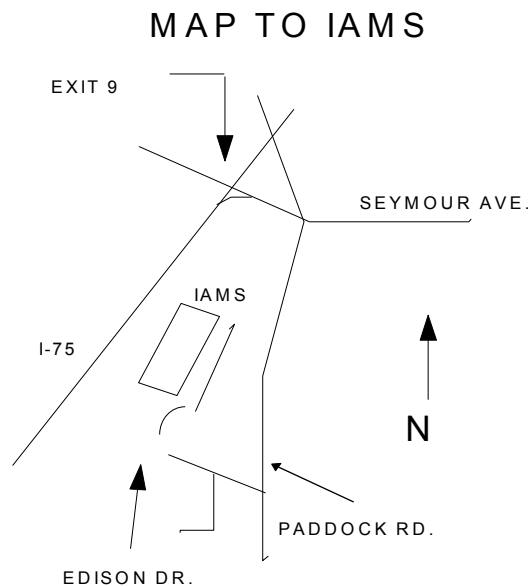
Dick Reiman, a registered PE in the State of Ohio, graduated from UC in 1949 with a BSEE degree. He was employed by the Cincinnati Gas & Electric Co. for 37 years, mainly in the General Engineering Department on Electric Generation electrical projects. He is a Life Member of both IEEE and ESC. Dick retired from CG&E in 1988.

Busy in retirement, Dick is a volunteer Tour Guide & a Volunteer Interpreter at the Cincinnati Zoo, and a Volunteer Presenter in the Education Department of the Museum of Natural History where he is currently team teaching a program on the Ice Age and Caves. He also writes a column on the History of Electrical Engineering for the IEEE Cincinnati Section Newsletter.

DIRECTIONS

- I-75 South to Paddock Rd. Exit (within I-275 beltway in Cincinnati).
- Turn left (east) onto Paddock Rd. for approx. 1/2 mile to Edison Dr. (right side of road).
- Follow the lane to the IAMS building and park in front.

SEE MAP BELOW



CHAIRMAN'S MESSAGE

By JIM EVERLY

Last month's program on Fuzzy Logic by Dr. Alfred Scheide was a great success. The attendance was fantastic and we all had an chance to get better acquainted with the concepts of Fuzzy Logic.

This month's program will focus on historical aspects and individuals who have contributed to the field of Electrical Engineering. Let's have another good turnout for this meeting. Again, consider bringing a friend or student with you. Be sure to join us for the social hour and dinner before the meeting.

The Executive Committee is scheduled for its Spring Quarter meeting later this month. What would you like the Cincinnati Section of the IEEE to do ? What kind of programs do you want ? Please give me a call or drop me a line at Mail Location 103, University of Cincinnati. Your ideas are important and the Executive Committee will consider your suggestions and get back with you.

Again this month I would like to welcome new IEEE members as well as existing members new to the Cincinnati Section. The names of these individuals are included in this newsletter. A sincere thanks to Randy Holt, our membership chairman, for providing these names.

For those of you scheduled to take the Professional Engineer's Examination in Columbus this month.....Good Luck!!!!

OOOPS!!!

As you know, the phone number given in last month's newsletter for Dee Scott was incorrect. The number has been corrected in this newsletter and also appears on the last page along with the other numbers. Sorry! - *Editor*.

DUST OFF YOUR CLUBS!!

The annual IEEE Cincinnati Section Golf Outing is quickly approaching! It will be held on Friday, June 4, 1993 at the Fairfield Golf Course.

WE WOULD LIKE TO EXTEND A WELCOME TO THE FOLLOWING NEW MEMBERS OF THE CINCINNATI SECTION OF THE IEEE:

The following individuals are new IEEE members in the Cincinnati Section:

Todd Dailey	Lawrence E. Schloemer
Walter J. Helms	David F. Wissel

The following individuals are existing members in the Cincinnati Section:

Jill E. Allen	Alexander G. Ferris
Michael S. Borman	C. E. Hamilton
Kenneth E. Cornelison	David O. Humphrey
Neal R. Fildes	

**COURSE ANNOUNCEMENT
ADAPTIVE/NEURAL CONTROL SYSTEMS
UNIVERSITY OF CINCINNATI**

Dr. Marios Polycarpou, of the Department of Electrical and Computer Engineering at UC will be teaching a course on Adaptive / Neural Networks this Spring. Although it is probably too late to sign up for it in the Spring Quarter, he will offer the course again in the near future if there is enough interest.

ECE 717- Adaptive/Neural Control Systems

Time: Mon, Wed, Fri, 3:30-3:50 pm

Prerequisites: Basic knowledge of linear control systems

Textbook: The course material will be based on class notes which will be handed out in class

Objective: The objective of the course is to introduce the student to the exciting world of learning/adaptive systems (also known as self-tuning or self-organizing systems) and the application of adaptive, neural network, and fuzzy logic techniques in identification and control of dynamical systems.

Topics: Some of the topics to be covered are:

What is "intelligent" control? What are adaptive systems and neural networks ? Why neural networks? What is fuzzy logic? Mathematical modeling of dynamical systems; Linear vs. nonlinear models; Lyapunov stability theory; Optimization techniques; Parameter estimation and convergence; Persistency of excitation; On-line approximation; Neural networks as a tool for on-line approximation; Simultaneous Estimation and Control; Design of Adaptive Control Schemes; Neural Network Control Schemes; Fuzzy logic controllers; Robustness.

ABOUT THE INSTRUCTOR

Dr. Polycarpou received the B.A. (Cum Laude) degree in Computer Science and B.Sc. (Cum Laude) degree in Electrical Engineering from Rice University, Houston, TX, in 1987 and the M.S. and Ph.D. degrees in Electrical Engineering from the University of Southern California, Los Angeles, CA, in 1989 and 1992, respectively. In 1992, he joined the Department of Electrical and Computer Engineering, University of Cincinnati, where he is currently an Assistant Professor. He teaches and conducts research in the areas of systems and control, neural network learning, adaptive and intelligent control, and nonlinear dynamical systems.

For more information contact:

- Prof. Polycarpou at (513) 556-4763
- Peggy Simpson at (513) 556-2833

Dee Scott (call for meeting reservations)	385-9446
Jim Everly - Chairman	777-7129 (Home); 556-4224 (Fax)
	556-4241 (Office)
Bill Lohner - Vice Chairman	385-7268
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APRIL 1993
IEEE CINCINNATI SECTION NEWSLETTER



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Cincinnati, OH 45221

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